CLAIMS

1. A divider block for distributing a low volume of a fluid at high pressure, comprising

a base plate including a one piece inlet section, an end section which allow for the installation of a divider block directly to the section and include a fluid outlet, and one or more intermediate base sections, each intermediate base section including a fluid outlet;

one or more divider block sections mounted on the one or more intermediate base sections, the divider block section having a piston bore for receiving a piston, the piston bore having walls sufficiently thickness to resist deformation under pressure such that the volume of fluid dispensed at 3500 psi is accurate within 15%.

2. The divider block of claim 1 further comprising a balancing valve at each fluid outlet.

3. The divider block assembly of claim 2 in which the intermediate base plate fluid outlet includes non-pipe threads and a sealing device to attaching the balancing valve to the intermediate base section.

4. The divider block of claim 2 in which multiple divider block sections are mounted on multiple intermediate base sections, and in which the balancing valves maintain the output pressures within 500 psi at each fluid outlet.

5. The divider block of claim 1 in which each divider block section is attached to a corresponding intermediate base section by more than two threaded fastener.

6. The divider block of claim 5 in which each divider block section is attached to a corresponding intermediate base section by four threaded fasteners.

7. The divider block of claim 1 in which the inlet section, the end section, and the one or more intermediate base sections are held together by four or more heat treated fasteners having diameters of greater than 0.300 in. and further comprising o-rings positioned

at fluid connections between the connected sections to prevent leaking of fluid flowing between sections.

8. The divider block of claim 1 in which the inlet section and at least one intermediate base section are combined into a single block.

9. The divider block of claim 1 in which the end section and at least one intermediate base section are combined into a single block.

10. The divider block of claim 1 in which the base plate comprises a single block including the inlet section and an intermediate section, a single block including an end section and an intermediate section, and an additional intermediate section.

11. A divider block section for use at high fluid pressures and having a bore for receiving a piston, the solid material around the bore having sufficient thickness to resist significant deformation at pressures greater than 2000 psi.

12. The divider block section of claim 11 in which the bore expands less than 0.00001 at 2000 psi.

13. The divider block section of claim 11 in which the bore expands less than 0.00001 at 3,500 psi.

14. The divider block section of claim 11 in which the bore has an inner diameter of 0.30 or greater and expands less than 0.000075 at 3,000 psi.

15. The divider block section of claim 11 in which the bore has an inner diameter of 0.30 or greater and expands less than 0.00005 at 3,000 psi.

16. The divider block section of claim 11 in which the bore has an inner diameter of 0.15 or greater and expands less than 0.000015 at 3,000 psi.

17. The divider block section of claim 11 in which the bore has an inner diameter of 0.300 or greater and expands less than 0.00001 at 3,000 psi.

18. The divider block section of claim 11 in which the bore has an inner diameter of about 0.360 or greater and expands less than 0.0001 at 3,000 psi.

19. The divider block section of claim 11 in which the bore has an inner diameter of about 0.360 or greater and expands less than 0.00005 at 3,000 psi.

20. The divider block section of claim 11 in which the solid material around the bore having sufficient thickness to resist significant deformation at 7,500 psi.

21. The divider block section of claim 11 in which the solid material around the bore having sufficient thickness to resist significant deformation at 10,000 psi.

22. The divider block section of claim 11 in which the solid material around the bore has a thickness of at least .400 in at its thinnest part.

23. The divider block section of claim 11 in which the volume of fluid dispensed is accurate to within 10% at 3000 psi.

24. The divider block section of claim 11 in which the volume of fluid dispensed is accurate to within 10% at 5000 psi.

25. The divider block section of claim 11 in which the volume of fluid dispensed is accurate to within 5% at 3000 psi.

26. The divider block section of claim 11 in which the volume of fluid dispensed is accurate to within 5% at 5000 psi.